GENERAL RECOMMENDATION FOR COMMISSION CONSIDERATION

TO:

Robert L. Ziehmer, Director

FROM:

Tom A. Draper, Deputy Director (Chairman, Regulations Committee)

RECOMMENDATION FOR:

Final action on Orders of Rulemaking, which are attached for Commission consideration. All changes will be effective as soon as possible after publication in the *Missouri Register*.

ACTION ITEMS:

3 CSR 10-4.110 General Prohibition; Applications.

Provides for clarification of the rule with respect to wildlife raised or held in captivity.

3 CSR 10-9.220 Wildlife Confinement Standards.

- Changes term "wild animals" to "wildlife."
- Enhanced fence standards for all new facilities:
 - Single 8' fence.
 - o Additional requirements related to materials and spacing of fences.
 - Existing facilities will have 24 months from the effective date of the rule to meet enhanced fencing standards.
- Class I and Class II Wildlife Breeder Permits are also used by auction houses and other
 businesses that serve as "brokers" for cervids that are bought and sold. Many animals
 may move through facilities owned by these businesses and may be held in confined
 areas that have recently held animals from herds of variable disease status. Existing
 Wildlife Breeder Permit regulations were not designed to address such operations and
 may not adequately describe the conditions under which these businesses should be
 operated. Removed exemption for temporary exhibits and auction sites.
- Deer must be inside of an approved facility which meets the standards shown earlier unless they are on a truck between facilities and the driver has a valid/completed CVI or Breeder Movement Certificate.
- Use of the term "cervid" only occurs in section (3) as this will dictate confinement for Breeders and Big Game Hunting Preserves. The remaining changes are specific to "white-tailed deer or mule deer".

Recommended by: Jom	A. Waper	_Approved:	Pober III
9 2	Deputy Director /		Director
Date: October 8th	2014	Date:	410s, 8 to

3 CSR 10-9.353 Privileges of Class I and Class II Wildlife Breeders.

- New applicants for a Class I Wildlife Breeders Permit to hold white-tailed deer or mule deer must take an exam.
 - o Class II Wildlife Breeders are already required to pass an exam.
- Ban importation of live white-tailed deer, mule deer or their hybrids.
 - o A similar ban on importation of skunks, foxes, racoons, and coyotes due to disease concerns has been in place for years.
- Requires an onsite inspection prior to and after construction of a new facility as part of the application process.
- Removes the exemption that allowed non-residents to ship, transport, hold, and consign deer without a premit.
 - o Non-residents may do business in Missouri under the following circumstances:
 - § If they have a Missouri Wildlife Breeder or Licensed Hunting Preserve Permit. In order to have this permit, they must have a permitted facility in Missouri.
 - § If they purchase a deer from a Missouri permit holder, have the appropriate permit from their home state, and a completed Certificate of Veterinarian Inspection (CVI) from Missouri they may transport the animal(s) out of the state, but they cannot "hold" them in Missouri without a Missouri permit.
 - § If they purchase an animal from a facility permitted by the Department, they can have that animal shipped to them if the shipper has the completed CVI.
- Shipping between permitted facilities may occur if the shipper has in their possession a completed Breeder Movement Certificate
- Removes the exemption that allowed wildlife breeders to exhibit white-tailed deer or
 mule deer in locations other than the one listed on the permit. This change removes the
 exemption for holding deer in temporary facilities for display. Deer must be inside an
 approved facility which meets the standards shown earlier unless they are on a truck
 between facilities and the driver has a valid/completed CVI or Breeder Movement
 Certificate.
- Requires CWD samples, to be collected by a veterinarian, for all mortalities of whitetailed deer, mule deer, or their hybrids 6 months old or older.
 - o The Department reserves the right to require more disease sampling during mortality/morbidity events.
 - o Under certain conditions, the director may exempt a permit holder from this rule due to a mass casualty/mortality event.
 - § The exemption must orginate from an accredited veterinarian and be reported to a conservation agent, Protection regional supervisor, or the state wildlife veterinarian of the Department.
 - § The permit holder must allow the Department access to collect disease samples from all known cervid mortalities, pertaining to, and in the event of a mass casualty/mortality event.
- Class I and Class II wildlife breeders that hold white-tailed deer, mule deer, or their hybrids must be enrolled in a USDA-approved CWD-herd certification program.

- Confirmed positive test results must be reported to the conservation agent and state wildlife veterinarian.
- Requires compliance with a Department-approved disease response plan if CWD is discovered.
- Requires documentation and records for movement of white-tailed deer or mule deer.
 - o Requires documents be kept for 5 years.
 - o Source herds must be in a USDA-approved CWD-herd certification program.
- No permits will be issued for a period of five years for a new facility within 25 miles of where a CWD-postive has been confirmed.

3 CSR 10-9.359 Class I and Class II Wildlife Breeder: Records Required.

- Requires annual herd inventory, presence of a veterinarian during the annual inventory, signature of veterinarian on herd records, individual animal identification, and individual animal documentation, including CWD testing results.
 - o Specifies 5 years as the minimum period of time that records must be kept.

3 CSR 10-9.560 Licensed Hunting Preserve Permit

• This amendment disallows propagating, holding in captivity, and hunting hogs within a big game hunting preserve unless already approved by a specific date.

3 CSR 10-9.565 Licensed Hunting Preserve: Privileges.

- Changes fencing "height" to "requirements" as specified in 3 CSR 10-9.220.
- Requires CWD sampling, collected by a veterinarian, for all cervid mortalities that are 6months old or older.
 - o The Department reserves the right to require more disease sampling during mortality/morbidity events.
 - O Under certain conditions, the director may exempt a permit holder from this rule in the event of a mass casualty/mortality event.
 - § The exemption must orginate from an accredited veterinarian and be reported to a conservation agent, Protection regional supervisor, or the state wildlife veterinarian of the Department.
 - § The permit holder must allow the Department access to collect disease samples from all known cervid mortalities, pertaining to, and in the event of a mass casualty/mortality event.
- Confirmed positive disease results must be reported to the conservation agent and state wildlife veterinarian.
- Requires compliance with a Department-approved disease response plan if CWD is discovered.
- Requires documentation and records for movement of cervids.
 - o Require documents be kept for 5 years.
 - Source herds must participate in a USDA-approved CWD-herd certification program.
- No new permits will be issued for a period of five years for facilities within 25 miles of where a CWD postive has been confirmed.

- Bans holding imported live cervids in a big game hunting preserve.
- Use of the term "cervid" as all deer are considered game within a big game hunting preserve. Used in reference to specific fencing standards and CWD testing.

3 CSR 10-9.566 Licensed Hunting Preserve: Records Required.

- Requires a system of inventory for acquired ungulates that includes individual animal identification and documentation and CWD test results.
 - o Specifies 5 years as the minimum period of time that records must be kept.
 - o If privileges of a wildlife breeder are exercised, records must follow breeder requirements.

Division 10—Conservation Commission

Chapter 4—Wildlife Code: General Provisions

ORDER OF RULEMAKING

By the authority vested in the Conservation Commission under sections 40 and 45 of Art. IV, Mo. Const., the commission amends a rule as follows:

3 CSR 10-4.110 General Prohibition; Applications is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on July 15, 2014 (39 MoReg 1200-1201). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: While there were no comments directly relating to this amendment, the commission received three hundred six (306) comments from individuals who indicated that captive white-tailed deer, mule deer, and their hybrids should not be considered "livestock". Forty-eight (48) comments were received from individuals that believe any privately-owned captive white-tailed deer, mule deer, or their hybrids held behind high fences should be considered "livestock", not wildlife.

In addition, one thousand nine hundred and eighty-three (1,983) comments were received from individuals who expressed general support for stricter regulation of the captive cervid industry and one hundred fifty-four (154) comments were submitted by individuals who voiced general opposition to all proposed changes.

RESPONSE: In response to the comments that captive deer should be considered livestock, not wildlife, captive deer have been considered wildlife and regulated by the Conservation Commission since the Commission was created in 1937. White-tailed deer and mule deer are wild by nature, regardless of whether they have been raised in captivity. This is true for other wildlife held in captivity such as bears, mountain lions, timber rattlesnakes and raccoons. The proposed amendment simply codifies the Commission's authority over captive wildlife that has been in place for over seventy five (75) years.

In response statements regarding the economic contribution of the captive cervid industry, the department recognizes the economic contribution of the captive cervid industry and this regulation will not adversely impact that contribution. Furthermore, twelve thousand (12,000) Missouri jobs and hundreds of businesses and communities depend on the approximately \$1 billion boost in economic activity related to deer hunting and watching that is supported by five hundred twenty thousand (520,000) deer hunters, millions of wildlife watchers, and thousands of landowners.

In response to the seriousness of the threat posed to Missouri's captive and free-ranging deer population by chronic wasting disease (CWD), CWD is transmitted by prions, which are abnormal proteins that attack the nervous system, and is always fatal to the infected animal. There is currently no approved live test for CWD, with the only approved test being performed post-mortem. CWD is spread both directly from deer to deer and indirectly to deer from infected soil and other surfaces. The CWD prions accumulate in the brain, spinal cord, eyes, spleen and lymph nodes of infected animals. Once well established in an area, CWD is impossible to eradicate. States with CWD must focus on limiting the spread of the disease and preventing its introduction to new areas. CWD could substantially reduce infected cervid populations by lowering adult survival rates and destabilizing long-term population dynamics. An example of active management limiting CWD is shown in Illinois where it has been kept at a low prevalence rate (annual prevalence rate of 0.94 ± 0.23%; Manjerovic, M.B., M. L. Green, N. Mateus-Pinilla, and J. Novakofski. 2014. The importance of localized culling in stabilizing chronic wasting disease prevalence in white-tailed deer populations. Preventive Veterinary Medicine 113(2014):139-145.).

No changes to the rule have been made as a result of these comments.

Division 10—Conservation Commission

Chapter 9—Wildlife Code: Confined Wildlife: Privileges, Permits, Standards

ORDER OF RULEMAKING

By the authority vested in the Conservation Commission under sections 40 and 45 of Art. IV, Mo. Const., the commission amends a rule as follows:

3 CSR 10-9.220 Wildlife Confinement Standards is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on July 15, 2014 (39 MoReg 1201-1208). Those sections with changes are reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: The commission received eleven thousand three hundred twenty-eight (11,328) comments in support of improved fencing standards, several of whom encouraged the commission to implement more stringent fencing requirements. The commission received one thousand two hundred fifty (1,250) comments in opposition to the proposed changes. Those individuals who expressed opposition to proposed changes believe that captive cervid owners will erect fences capable of holding the animals in order to protect their investment and cited concerns regarding overregulation, diminished rights of private property owners, the onerous cost of complying with the new rules, and the need to promote and protect small business interests and alternative agriculture. Others questioned the science used to formulate the proposed regulation changes, the seriousness of the threat posed to Missouri's captive and free-ranging deer population by chronic wasting disease (CWD), and don't feel additional regulations are warranted. Still others voiced opposition to the proposed amendments due to their personal belief that wildlife should not be held behind fences.

The Conservation Commission invited the public to specifically comment on whether the proposed fencing standards contained in 3 CSR 10-9.220(3) should be applied to all existing permittees, and if so, what timeframe, if any, should be allowed for permittees to bring their facility into compliance with the proposed fencing standards. Of the sixty-three (63) individuals commenting, two (2) voiced support for "grandfathering" existing facilities while sixty-one (61) requested that all existing captive cervid facilities be required to comply with the new regulations. None of those voicing opposition offered a specific timeframe for enforcement of new regulations for existing facilities.

The commission received three hundred six (306) comments from individuals who indicated that captive white-tailed deer, mule deer, and their hybrids should not be considered "livestock" and many voiced opposition to legislation that would transfer regulatory authority for these animals to the Missouri Department of Agriculture. Forty-eight (48) comments were received from individuals that believe any privately-owned captive white-tailed deer, mule deer, or their hybrids held behind high fences should be considered "livestock". Those voicing opposition to the changes noted that the captive cervid industry is an important contributor to Missouri's economy

and questioned the seriousness of the threat posed to Missouri's captive and free-ranging deer population by CWD.

The commission received no comments regarding the proposal to change references to "wildlife animals" to "wildlife", disallow the confinement of white-tailed deer, mule deer, and their hybrids in mobile exhibits and auction facilities. However, the department received one thousand nine hundred and eighty-three (1,983) comments from individuals who expressed general support for stricter regulation of the captive cervid industry, one hundred fifty-four (154) comments from individuals who voice general opposition to all proposed changes, and fifty-nine (59) comments calling for a moratorium on new facilities in Missouri.

RESPONSE AND EXPLANATION OF CHANGES: In response to comments on concerns of overregulation, the Conservation Commission goes to great lengths to evaluate the importance and need for any regulation. Informing and/or educating the public are always considered first before any regulation is thoroughly vetted in the Department of Conservation. At times, however, the Department of Conservation must propose regulations to manage and/or protect the forest, fish, and wildlife of Missouri. Per its authority granted by the people and the constitution of Missouri, the Conservation Commission follows a regulatory process that evaluates the science, internal input, and public input along with determining if there is absolutely any other option, such as public education, that can be taken rather than regulation.

In response statements regarding the economic contribution of the captive cervid industry, the department recognizes the economic contribution of the captive cervid industry and this regulation will not adversely impact that contribution. Furthermore, 12,000 Missouri jobs and hundreds of businesses and communities depend on the approximately \$1 billion boost in economic activity related to deer hunting and watching that is supported by 520,000 deer hunters, millions of wildlife watchers, and thousands of landowners.

In response to comments on the science used to formulate this rule and the seriousness of the threat posed to Missouri's captive and free-ranging deer population by chronic wasting disease (CWD), CWD is transmitted by prions, which are abnormal proteins that attack the nervous system, and is always fatal to the infected animal. There is currently no approved live test for CWD, with the only approved test performed post-mortem. CWD is spread both directly from deer to deer and indirectly to deer from infected soil and other surfaces. The CWD prions accumulate in the brain, spinal cord, eyes, spleen and lymph nodes of infected animals. Once well established in an area, CWD is impossible to eradicate. States with CWD must focus on limiting the spread of the disease and preventing its introduction to new areas. CWD could substantially reduce infected cervid populations by lowering adult survival rates and destabilizing long-term population dynamics. An example of active management limiting CWD is shown in Illinois where it has been kept at a low prevalence rate (annual prevalence rate of $0.94 \pm 0.23\%$; Manjerovic, M.B., M. L. Green, N. Mateus-Pinilla, and J. Novakofski. 2014. The importance of localized culling in stabilizing chronic wasting disease prevalence in white-tailed deer populations. Preventive Veterinary Medicine 113(2014):139-145.).

In response to comments on diminished rights of private property owners, the department disagrees that the proposed regulation diminishes the rights of property owners. Property owners will continue to be able to use their property for breeding and/or hunting captive wildlife. The proposed regulations are intended to reduce the risk of disease transmission between captive cervids and free-ranging deer via movement into and out of captive facilities. Current requirements in the *Wildlife Code* have not been sufficient to prevent the over 150 reported escapes that have occurred over the last three years.

In response to comments on the need to promote and protect small business interests and alternative agriculture, the department's mission, as established by Missouri citizens in the Missouri constitution, is to protect and manage the forest, fish, and wildlife resources of the state of Missouri. Consistent with that mission, the department recognizes that Missouri's economy and quality of life are built on our forest, fish, and wildlife resources. More than \$11 billion is generated each year by conservation-related activities, such as hunting, fishing, wildlife watching, and forest products. In sum, business interests are advanced when the natural resources, including wildlife, are healthy and sustainable. The proposed regulations are intended to reduce the risk of disease transmission, and so will have long term benefits for the economic interests that rely on deer breeding and hunting in Missouri.

In response to comments on opposition to the rule because wildlife should not be held behind fences, the Department of Conservation has maintained regulatory oversight of deer breeders and big game hunting preserves since the inception of the Conservation Commission.

In response to the comments that captive deer should be considered livestock, not wildlife, captive deer have been considered wildlife and regulated by the Conservation Commission since the Commission was created in 1937. White-tailed deer and mule deer are wild by nature, regardless of whether they have been raised in captivity. This is true for other wildlife held in captivity such as bears, mountain lions, timber rattlesnakes and raccoons. The proposed amendment simply codifies the Commission's authority over captive wildlife that has been in place for over 75 years.

It is important to point out that amendments to the rules that define the privileges of Class I, Class II, and Licensed Hunting Preserves require compliance with a Department-approved disease response plan should a disease outbreak occur. A disease response plan may identify improved fencing requirements that may include a double fence approach.

The Department's original fencing proposal was for double fencing of all new permittees. Existing facilities would be grandfathered, and only required to double fence when the permit holder changed. Double fencing is preferred because it eliminates to the greatest possible extent the risk of disease transmission associated with animal movement out of and into the facility. The management of wildlife diseases focuses upon the ability to manage activities that heighten the risk of disease transmission. The Department's efforts to improve captive cervid regulations have two primary anchor points. The greatest risk of disease transmission is movement of animals across the landscape. Consequently, closing Missouri's borders to interstate movement of cervid species is of primary importance. The second most important strategy to lessen the risk of disease transmission is to ensure all mortality loss is tested for disease. When these two risk management strategies are implemented, the necessity of double fencing is reduced. The greater area of importance lies in reducing the risk of CWD moving into our state and finding it quickly, if it does, through mandatory disease testing.

During the public comment period, there was significant concern expressed by the industry that double fencing was unnecessary, as owners would erect fences to protect their investment, and be cost prohibitive. Several argued that it would prohibit current permittees from passing on their business to their heirs, who could not afford double fencing. There was also concern raised by others that the fencing standards should consistently apply to both existing and new permittees. Based upon the above analysis, if importation is banned and mandatory testing is required, then any further reduction in risk associated with double fencing becomes less

necessary. Staff believe the risk associated with fencing may be adequately addressed through enhanced fencing standards that do not include a double fence.

Consequently, in consideration of the burden on permittees from this requirement in relation to the amount of risk that is actually reduced by double fencing, and the fact that enhanced fencing standards may be adequate to address the risks associated with animal movement, staff is recommending that the proposed fencing regulation be amended to require all facilities (existing and new) to have a single fence with enhanced standards regarding material and spacing. Existing permittees should be given a reasonable amount of time to bring their existing facilities into compliance with this standard. Furthermore, the fencing specifications are being recommended because current fencing requirements are ambiguous and unclear, and the department wants permit holders to have objective criteria to be able to verify their properties are sufficiently secured. In addition to the specifications outlined in the proposed amendment, the Department has added an option to the fence specifications for woven wire fasteners to provide additional flexibility for operators needing to come into compliance with the new fencing standards. Compliance with our fencing specifications should provide needed clarification to the industry.

Staff recommend the following changes:

- (3) Cages, pens, or other enclosures of individuals permitted to hold cervids [prior to November 30, 2014, shall be at least a single enclosure that extends at least a minimum of eight feet (8') high, shall be maintained in a condition to prevent an escape, and the permit holder shall fell all dead trees with a height greater than the distance to the perimeter fence on land(s) under his/her control.] shall meet the standards and requirements provided in this section no later than January 30, 2017. New permits for holding [captive] cervids on or after [November 30, 2014] January 30, 2015, will be limited to individuals who meet the following fencing and holding requirements:
- (A) [Except as otherwise provided in this rule, facilities shall be double fenced. Space between the facility's perimeter fence and any interior fence shall be maintained in a cleared, open condition at least ten feet (10') and no more than twenty feet (20') apart for the primary span of fence and no more than fifty feet (50') apart for turnarounds and corners and shall be constructed in accordance with the following: Cages, pens or other enclosures.
- [1. Perimeter fences shall extend at least a minimum of ten feet (10') high for its entire length, and consist of twelve and one-half (12 1/2) gauge woven wire, fourteen and one-half (14 1/2) gauge high-tensile woven wire, wood planks, or chain link. Strands of barbed wire shall not be used to achieve the maximum required height.]
- [2]1. All [interior] fencing shall extend at least a minimum of eight feet (8') high for its entire length, and consist of twelve and one-half (12 1/2) gauge woven wire, fourteen and one-half (14 1/2) gauge high-tensile woven wire, wood planks, or chain link. Strands of barbed wire shall not be used to achieve the maximum required height.
- [3]2. Spacing between vertical wires and wooden planks shall not exceed six and one-half inches (6 1/2").
- [4]3. If two (2) woven wire fences are combined, one (1) above the other, the woven wire fences shall be overlapped at least six inches (6") and firmly attached to each other at intervals no greater than three feet (3') or combined and firmly attached to each other at intervals no greater than six inches (6") apart with hog rings.
- [5]4. The fence bottoms shall be installed to provide not more than three inches (3") of ground clearance for its entire length.
- (B) Right-of-way.

- 1. The fence right-of-way shall be cleared for a minimum distance of six feet (6') on the outside of the [perimeter] fence on land(s) under his/her control and six feet (6') on the inside of the [interior] fencing.
- 2. **The permit holder shall fell** [All]**all** dead trees with a height greater than the distance to the [perimeter] fence [shall be felled] on land(s) under his/her control.
- (C) Fence posts.
- 1. Fence posts shall extend at least a minimum of eight feet (8') high [for interior fencing, and at least ten feet (10') high for perimeter fencing,] and shall be of sufficient strength to maintain fence integrity.
 - 2. Pine wood posts shall be treated.
 - 3. Wood and steel pipe posts shall be set to a minimum depth of three feet (3').
 - 4. Metal T-posts shall be installed according to manufacturers' specifications.
 - 5. Metal U-posts shall be of a sufficient strength to support the fence.
- (D) Line posts.
- 1. Wooden line posts shall be a minimum of four inches (4") in diameter and shall not be spaced more than twenty-four feet (24') apart.
 - 2. Steel pipe line posts shall-
 - A. Be a minimum of two and three-eighths inches (2 3/8") in outside diameter; and
 - B. Not spaced more than twenty-four feet (24') apart.
 - 3. Metal "T" and "U" line posts shall be spaced no more than twenty feet (20') apart.
- 4. If the woven wire is not high tensile, there shall be a wooden or steel pipe post every sixty feet (60').
- 5. Line braces shall be used at least every one thousand feet (1000') of straight line distance and, if necessary, at shorter intervals to sufficiently support the fence.
- (E) Corner and end posts.
- 1. Wooden corner and end posts shall be a minimum of five inches (5") in diameter.
- 2. Steel pipe corner and end posts shall be a minimum of two and seven-eighths inches (2 7/8") in outside diameter.
- 3. Corner and end posts of other materials shall be of sufficient strength to maintain fence integrity and must be approved by the department prior to installation.
- 4. Corner and end posts must be set in concrete and braced in a manner to sufficiently support the fence.
- (F) Gates shall be-
 - 1. Constructed to meet the specifications of the fence;
- 2. Equipped with at least one (1) latching and one (1) locking device; and
- 3. Gate support posts must be braced in a manner to sufficiently support the fence.
- (G) Water gaps and stream crossings.
- 1. Swinging water gaps and stream crossings shall be constructed to equal or exceed the standards of the fence.
 - 2. These crossings shall be adequate to prevent ingress and egress during high water.
 - 3. Permissible water gaps are as follows:
- A. Swinging gates constructed to match the contour of the stream supported by a galvanized steel cable or hinge. Cable shall be a minimum of five-eighths inch (5/8") in diameter;
 - B. Pipe with swinging barrier;
 - C. Pipe with fixed mesh barrier; and
 - D. Heavy gauge woven barrier contoured to fit the gap.
- (H) If topographic, natural, or other conditions exist that enable cervids to pass through, under, or over the fence, the permit holder shall be required to supplement the fence with additional, stronger or higher fence posts, special grading, additional wire to increase fence height, or other measures to prevent escape.

(I) Fencing shall be maintained in a condition to prevent an escape at all times. at all times.

REVISED PRIVATE ENTITY COST: The aggregate private entities costs will range from two million two hundred thirty eight thousand nine hundred seventy one (\$2,238,971) to two hundred twenty seven thousand four hundred eighty nine (\$227,489) for big game hunting preserves and a range of two hundred thirty one thousand three hundred seventy nine (\$231,379) to twenty nine thousand eight hundred seventy nine (\$29,879) for Class I and Class II wildlife breeders that hold white-tailed deer, mule deer, or their hybrids to come into compliance for clarification of this rule. The actual aggregate cost will vary with the actual size of each facility, location, type of repair or upgrade, and the number of facilities needing to repair or upgrade their fences. The aggregate cost will also vary with inflation and market.

REVISED FISCAL NOTE PRIVATE ENTITY COST

I. RULE NUMBER

Title: 3 - Department of Conservation

Division: 10 Conservation Commission

Chapter: 9 Confined Wildlife: Privileges, Permits, Standards

Type of Rulemaking: Proposed Amendment

Rule Number and Name: 3 CSR 10-9.220 Wildlife Confinement Standards

II. SUMMARY OF FISCAL IMPACT

Estimate of the number of entities by class which would likely be affected by the adoption of the proposed rule:	Classification by types of the business entities which would likely be affected:	Estimate in the aggregate as to the cost of compliance with the rule by the affected entities:
See Table 1	See Table 1	See Table 1

III. WORKSHEET

Table 1. Aggregate cost¹ for a range of fence repair costs by a number range of facilities that require repair of their eight foot (8') fence.

	Range of Cost for Fence Repair			
Percentage of Total Number of Facilities Requiring Repair (Number of Facilities)	\$1.00	\$2.50	\$5.00	Total
Big Game Hunting Preserves				
75% (33)				
(11)	\$ 263,408			
(11)		\$ 658,521		
(11)			\$ 1,317,042	
				\$ 2,238,971
50% (22)				
(8)	\$ 191,570			
(7)		\$ 419,059		
(7)			\$ 838,118	
				\$ 1,448,746
25%(11)				
(4)	\$ 95,785			
(4)		\$ 239,462		
(3)			\$ 359,193	
				\$ 694,440

Table 1. Continued.

	Range of Cost for Fence Repair			
Percentage of Total Number of Facilities Requiring Repair (Number of Facilities)	\$1.00	\$2.50	\$5.00	Total
Big Game Hunting Preserves				
10%(4)				
(2)	\$ 47,892			
(1)		\$ 59,866		
(1)			\$ 119,731	
				\$ 227,489
Class I and Class II Wildlife Breeders				
75% (166)				
(56)	\$ 27,657			
(55)		\$ 67,907		
(55)			\$ 135,815	
				\$ 231,379
50% (111)		·		
(37)	\$ 18,273			
(37)		\$ 45,683		
(37)			\$ 91,366	
				\$ 155,323

Table 1. Continued.

	Range of Cost for Fence Repair			
Percentage of Total Number of Facilities Requiring Repair (Number of Facilities)	\$1.00	\$2.50	\$5.00	Total
Class I and Class II Wildlife Breeders				
25%(55)				
(19)	\$ 27,163			
(18)		\$ 22,224		
(18)			\$ 44,449	
				\$ 93,836
10%(22)				
(8)	\$ 3,951			
(7)		\$ 8,643		
(7)			\$ 17,286	
				\$ 29,879

¹Calculation used for each aggregate cost: {[(Number of Facilities)*(Fence Length for a Facility)]*[\$]} = Aggregate Cost

IV. ASSUMPTIONS

We assume it is unlikely that any existing facility that meets the current standard of an escape-proof 8 foot (8') fence will have to completely rebuild the entire fence. We assume that 75% or less of Class I and Class II wildlife breeders and big game hunting preserves need some form of repair for their fences to come into compliance for clarification of this rule. The assumption of 75% was indicated from field inspections performed by conservation agents. Furthermore, based on indications from conservation agent inspections, repairs to meet the clarification of this rule will vary by facility but do not seem to be extensive. Therefore, we have assumed the current facilities will have a range of repairs to make to the existing fence. Since it is unknown the specific extent of the repair required for each facility. We provide three costs (\$1.00, \$2.50, and \$5.00 per foot) to reflect the range of potential repair costs. We also provide a range for the number of facilities (33, 22, 11, and 4 big game hunting preserves; 166, 111, 55, and 22 Class I and Class II wildlife breeders that hold white-tailed deer, mule deer, or their hybrids) to reflect the range in the number of facilities requiring varying levels of repair. A square 12,875 square foot (ft²) facility (minimum square footage for 100 deer) is assumed for a Class I and Class II wildlife breeder permitted to hold whitetailed deer, mule deer, or their hybrids. The average self-reported size for big game hunting preserves was 820 acres for 2014. For the purpose of these calculations we also assumed the preserves were square in shape. We assume the total number of Class I and Class II wildlife breeders holding white-tailed deer, mule deer, or their hybrids and big game hunting preserves to be 221 and 44, respectively as of February 2014. There is no estimate provided for fences of new facilities as the proposed amendment is a clarification of the fencing specifications of the eight foot fence that is currently required.

Division 10—Conservation Commission

Chapter 9—Wildlife Code: Confined Wildlife: Privileges, Permits, Standards

ORDER OF RULEMAKING

By the authority vested in the Conservation Commission under sections 40 and 45 of Art. IV, Mo. Const., the commission amends a rule as follows:

3 CSR 10-9.353 Privileges of Class I and Class II Wildlife Breeders is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on July 15, 2014 (39 MoReg 1209-1215). Those sections with changes are reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: The commission received eleven thousand thirty-one (11,031) comments in support of the proposal to ban importation of live white-tailed deer, mule deer, and their hybrids and one thousand five hundred twenty-five (1,525) comments in opposition to the proposed changes. Those individuals who expressed opposition to proposed changes cited concerns regarding overregulation, diminished rights of private property owners, the onerous cost of complying with the new rules, and the need to promote and protect small business interests and alternative agriculture. Others questioned the science on which the proposed changes are based, the seriousness of the threat chronic wasting disease poses to Missouri's deer population and don't feel additional regulations are warranted. Some argued that deer routinely migrate across state lines and a ban on importation would be ineffective. Others voiced strong support for allowing importation of animals quarantined and tested for chronic wasting disease prior to entering Missouri or didn't believe this measure was necessary if mandatory disease testing and double fencing requirements are implemented and enforced.

The commission also received eleven thousand seven hundred eighty-nine (11,789) comments in support of the proposed change that would require Class I and Class II wildlife breeders to test all mortalities of white-tailed deer, mule deer, and their hybrids that are older than six (6) months of age for chronic wasting disease and to report confirmed positive disease results to the department, to comply with a mandatory herd disease response plan approved by the department in the event that chronic wasting disease (CWD) is discovered, and establishes a stipulation that the department can require additional disease sampling and testing during disease investigations or morbidity/mortality events. Eight hundred two (802) individuals voiced opposition to implementation of these mandatory testing requirements. Those individuals who expressed opposition to proposed changes argued that current regulations require them to test one hundred percent (100%) of the mortalities that occur inside their facilities while the Department of Conservation does not test to the same extent. Many cited concerns regarding overregulation, diminished rights of private property owners, the

onerous cost of complying with the new rules, and the need to promote and protect small business interests and alternative agriculture. Others questioned the science on which the proposed changes are based, the seriousness of the threat CWD poses to Missouri's deer population and don't feel additional regulations are warranted.

The commission received ten (10) comments supporting a ban on construction of any new Class I and Class II wildlife breeding facilities for white-tailed deer, mule deer, and their hybrids within twenty-five (25) miles of a location where CWD-positive animals have been confirmed by the department and four (4) comments in opposition to that ban. Many of the individuals voicing support questioned if that distance was sufficient to protect Missouri's free-ranging deer herd and those voicing opposition believe the twenty-five (25) mile boundary is arbitrary.

The commission received one (1) comment on the potential difficulty of retaining records for fifteen (15) years.

The commission received no specific comments regarding proposals that would require new applicants for a Class I wildlife breeder permit to hold white-tailed deer, mule deer, and their hybrids to pass a written examination provided by the department and have an on-site inspection of the breeding facility as part of the application process; disallow display of white-tailed deer, mule deer, and their hybrids at any location other than what is listed on the permit; remove the exemption for nonresidents to acquire a Class I or Class II wildlife breeder permit to ship, transport, or consign white-tailed deer, mule deer, and their hybrids to wildlife breeders within Missouri; require Class I and Class II wildlife breeders that hold white-tailed deer, mule deer, and their hybrids as well as source herds to maintain participation in a U.S. Department of Agriculture-approved CWD herd certification program. However, the commission received one thousand nine hundred and eighty-three (1,983) comments from individuals who expressed general support for stricter regulation of the captive cervid industry, one hundred fifty-four (154) comments from individuals who voiced general opposition to all proposed changes, and fifty-nine (59) comments calling for a moratorium on new facilities in Missouri.

RESPONSE AND EXPLANATION OF CHANGE: In response to comments on concerns of overregulation, the Conservation Commission goes to great lengths to evaluate the importance and need for any regulation. Informing and/or educating the public are always considered first before any regulation is thoroughly vetted in the Department of Conservation. At times, however, the Department of Conservation must propose regulations to manage and/or protect the forest, fish, and wildlife of Missouri. Per its authority granted by the people and the constitution of Missouri, the Conservation Commission follows a regulatory process that evaluates the science, internal input, and public input along with determining if there is absolutely any other option, such as public education, that can be taken rather than regulation.

In response to comments on diminished rights of private property owners, the department disagrees that the proposed regulation diminishes the rights of property owners. Property owners will continue to be able to use their property for breeding and/or hunting captive wildlife. The proposed regulations are intended to reduce the risk of disease transmission between captive cervids and free-ranging deer via movement into and out of captive facilities. Current requirements in the *Wildlife Code* have not been sufficient to prevent the over 150 reported escapes that have occurred over the last three years.

In response to comments on onerous cost of complying with the new rules, the Department's original fencing proposal was for double fencing of all new permittees. Existing facilities would be grandfathered, and only required to double fence when the permit holder changed. Double fencing is preferred because it eliminates to the greatest possible extent the risk of disease transmission associated with animal movement out of and into the facility. During the public comment period, there was significant concern expressed by the industry that double fencing was unnecessary, as owners would erect fences to protect their investment, and be cost prohibitive. Several argued that it would prohibit current permittees from passing on their business to their heirs, who could not afford double fencing. There was also concern raised by others that the fencing standards should consistently apply to both existing and new permittees. Based upon the above analysis, if importation is banned and mandatory testing is required, then any further reduction in risk associated with double fencing becomes less necessary. Staff believe the risk associated with fencing may be adequately addressed through enhanced fencing standards that do not include a double fence. Consequently, in consideration of the burden on permittees from this requirement in relation to the amount of risk that is actually reduced by double fencing, and the fact that enhanced fencing standards may be adequate to address the risks associated with animal movement, staff is recommending that the proposed fencing regulation be amended to require all facilities (existing and new) to have a single fence with enhanced standards regarding material and spacing. Staff are recommending that existing permittees should be given a reasonable amount of time, 24 months, to bring their existing facilities into compliance with this standard. See Response and Explanation of Change for 3 CSR 10-9.220 Wildlife Confinement Standards for specific changes.

In addition to fencing costs, permit holders that are currently active in the United States Department of Agriculture-approved chronic wasting disease certification program already test deer mortalities and assume the costs related to that testing. The additional costs related to testing deer from 6-months old to 12-months old were not considered burdensome because it was assumed few deer would die, on average, in that age class. The largest portion of the entity cost estimate for 3 CSR 10-9.353 Privileges of Class I and Class II Wildlife Breeders was in regards to those permit holders who do not already participate in the United States Department of Agriculture-approved chronic wasting disease certification program, which is approximately 32% of the Class I wildlife breeders that hold white-tailed deer, mule deer, or their hybrids. The Department of Conservation believes testing and enrolling herds into the United States Department of Agriculture-approved CWD certification program is necessary to reduce disease risk for the captive and free-ranging herds of this state. The Department of Conservation does recognize there are circumstances not under the control of the permit holder that may lead to a mass casualty/mortality event. These mass casualty/mortality events may be burdensome on the permit holder. As a result of comments, staff are recommending changes to the proposed amendments regarding mass casualty/mortality events under certain conditions.

In response to comments on the need to promote and protect small business interests and alternative agriculture, the department's mission, as established by Missouri citizens in the Missouri constitution, is to protect and manage the forest, fish, and wildlife resources of the state of Missouri. Consistent with that mission, the department recognizes that Missouri's economy and quality of life are built on our forest, fish, and wildlife resources. More than \$11 billion is generated each year by conservation-related activities, such as hunting, fishing, wildlife watching, and forest products. Furthermore,

12,000 Missouri jobs and hundreds of businesses and communities depend on the approximately \$1 billion boost in economic activity related to deer hunting and watching that is supported by 520,000 deer hunters, millions of wildlife watchers, and thousands of landowners. In sum, business interests are advanced when the natural resources, including wildlife, are healthy and sustainable. The proposed regulations are intended to reduce the risk of disease transmission, and so will have long term benefits for the economic interests that rely on deer breeding and hunting in Missouri.

In response to comments on the science used to formulate this rule and the seriousness of the threat posed to Missouri's captive and free-ranging deer population by chronic wasting disease (CWD). CWD is transmitted by prions, which are abnormal proteins that attack the nervous system, and is always fatal to the infected animal. There is currently no approved live test for CWD, with the only approved test performed post-mortem. CWD is spread both directly from deer to deer and indirectly to deer from infected soil and other surfaces. The CWD prions accumulate in the brain, spinal cord, eyes, spleen and lymph nodes of infected animals. Once well established in an area, CWD is impossible to eradicate. States with CWD must focus on limiting the spread of the disease and preventing its introduction to new areas. CWD could substantially reduce infected cervid populations by lowering adult survival rates and destabilizing long-term population dynamics. An example of active management limiting CWD is shown in Illinois where it has been kept at a low prevalence rate (annual prevalence rate of 0.94 ± 0.23%; Manjerovic, M.B., M. L. Green, N. Mateus-Pinilla, and J. Novakofski. 2014. The importance of localized culling in stabilizing chronic wasting disease prevalence in whitetailed deer populations. Preventive Veterinary Medicine 113(2014):139-145.).

In response to comments on deer routinely migrating across state lines and that a ban on importation would be ineffective, there are two factors to consider in regards to white-tailed deer migrating across state lines. First, although free-ranging white-tailed deer do not recognize state boundaries, they also do not typically traverse several states in their lifetimes; that is, any movement of free-ranging animals will be from neighboring states. Although it is true that some of our neighboring states have confirmed chronic wasting disease in their free-ranging herds, the cessation of any anthropogenic movement will greatly decrease the risk of disease introduction. Second, we have to remember the relative risk associated with the individual animals. Typical home ranges sizes of adult male white-tailed deer are 1-2 square miles with one-time dispersal distances less than 25 miles. Therefore, only the deer within a small geographic area around Missouri's border could be reasonably expected to potentially move into Missouri. However, this is not true when dealing with human-aided movement of captive cervids which cross multiple states in the matter of days or hours.

In response to comments on allowing importation of animals quarantined and tested for chronic wasting disease prior to entering Missouri or didn't believe this measure was necessary if mandatory disease testing and double fencing requirements are implemented and enforced, an issue is that chronic wasting disease is unique in its ability to elude diagnostics. Mandatory disease testing of mortalities and double fencing are risk mitigation measures, but neither will address the risk of disease introduction from imported animals. A ban on importation is the best proactive action to take without an effective and reliable live animal test. Without an accepted live animal test of CWD, no animal can be tested prior to importation. The current disease testing program only assesses that there is a low-risk of a herd having CWD because it relies on the testing of dead deer from the herd and cannot assess the status of individual animals.

In response to comments stating that current regulations require testing of 100% of the mortalities that occur inside their facilities while the Department of Conservation does not test to the same extent in the free-ranging deer population, there are several issues to consider. It is important to realize that captive and free-ranging wildlife present different challenges with disease detection. Both the testing in captive facilities and the testing of free-ranging deer are designed to reach sample sizes to reasonably detect CWD if it is present. Captive facilities, which participate in the voluntary program, are required to test 100% because of the relatively few deer that die within a facility on an annual basis. If there was a live animal test for CWD we could annually assess the status of the herd as with other regulated diseases such as tuberculosis and brucellosis. However, only testing mortalities greatly limits the number of deer that are tested within a facility. Therefore, in the absence of an approved live animal test we must ensure that a sufficient number of deer are tested to reasonably detect the disease. Additionally, while deer breeders typically make every reasonable effort to test all mortalities, some carcasses are not discovered in time to be tested. Third, not all breeders take part in the United States Department of Agriculture-approved chronic wasting disease certification program as it is voluntary. Finally, once an animal is moved to a hunting preserve it is not required to be tested under the guidelines of the United States Department of Agriculture-approved chronic wasting disease program. So animals that are moved to big game hunting preserves often die with unknown disease statuses.

In response to comments on banning construction of a breeding facility within 25-miles of a positive confirmed by the department, this was intended to reduce the risk of exposing more deer to the disease, which could then spread throughout the state. Published peer-reviewed studies have found that, on average, most deer do not disperse more than approximately 25–30 miles (Nixon, C. et al. 2007. White-Tailed Deer Dispersal Behavior in an Agricultural Environment. American Midland Naturalist, 157:212-220.; Diefenbach, D. et al. 2008. Modeling Distribution of Dispersal Distances in Male White-Tailed Deer. Journal of Wildlife Management, 72:1296-1303.). The Department of Conservation does recognize that five-years has been used as a quarantine period within the United States Department of Agriculture-approved Chronic wasting disease certification program. Changes are recommended for this rule to reflect this quarantine period in regards to new facilities within 25-miles of a positive confirmed by the department.

In response to comments on difficulty of retaining records for 15 years, staff agree and are recommending changes to the rule to reflect a more common period of record retention found in veterinarian practices.

The following changes are being recommended to the proposed amendment as a result of the comments with additional changes to this rule made for clarity:

(17) **Except as provided in this section**, [*The*]**the** holder of a Class I or Class II wildlife breeder permit shall have an accredited veterinarian collect and submit samples from all known cases of mortality for cervids over six (6) months of age to a United States Department of Agriculture approved laboratory for Chronic Wasting Disease testing. The department reserves the right to require additional sampling and testing during disease investigations or morbidity/mortality events. Animal health standards and movement activities shall comply with all state and federal regulations. The holder of a Class I or Class II wildlife breeder permit must maintain participation in a United States

Department of Agriculture-approved Chronic Wasting Disease-herd certification program to hold white-tailed deer, white-tailed deer-hybrids, mule deer, or mule deer-hybrids; failure to participate and comply with the certification program may result in the suspension or revocation of permit privileges.

- (A) In the event of a mass casualty/mortality event, the director of the department may exempt the holder of a Class I or Class II wildlife breeder permit from the Chronic Wasting Disease testing requirements within this rule. The following conditions apply:
- 1. All mass casualty/mortality event exemption requests must originate from an accredited veterinarian and must be verbally reported to a conservation agent, regional protection supervisor, or the state wildlife veterinarian of the department.
- 2. The department will have access to collect and submit disease samples from all known cases of mortality for cervids, pertaining to, and in the event of a mass casualty/mortality event.
- (18) Confirmed positive results from any disease test for a white-tailed deer, white-tailed deer-hybrids, mule deer, or mule deer-hybrids must be verbally reported by the permit holder to a conservation agent or regional protection supervisor of the department within twenty-four (24) hours of receiving the report and provide a copy of the testing report to the state wildlife veterinarian of the department within seventy-two (72) hours of receiving the report. In the event of confirmed positive results from a Chronic Wasting Disease test, the permit holder shall comply with a herd disease response plan approved by the department. The plan [will]may include, but not be limited to, quarantine requirements, testing and depopulation, premises cleaning and disinfection, additional fencing requirements, and restocking guidelines. Failure to comply with an approved herd disease response plan may result in the suspension or revocation of permit privileges.
- (19) All white-tailed deer, white-tailed deer-hybrids, mule deer, or mule deer-hybrids acquired by a permit holder must be individually identified on a Breeder's Movement Certificate or a Certificate of Veterinary Inspection. A Breeder's Movement Certificate may be completed by the breeder. The form must list the official identification, age, gender, species, complete address of both the origin and destination, and complete address and name of both the buyer and seller. The original form must accompany the shipment and a copy shall be maintained by the herd of origin for at least [fifteen (15)]five (5) years. Sources for white-tailed deer, white-tailed deer-hybrids, mule deer, or mule deer-hybrids must be enrolled in a United States Department of Agriculture-approved Chronic Wasting Disease-herd certification program.
- (20) New **permits for** Class I and Class II wildlife breeding facilities for white-tailed deer, white-tailed deer-hybrids, mule deer, or mule deer-hybrids [shall]will not be [constructed] **issued for a period of five (5) years** within twenty five (25) miles of a location where Chronic Wasting Disease-positive animal(s) have been confirmed by the department.

Division 10—Conservation Commission

Chapter 9—Wildlife Code: Confined Wildlife: Privileges, Permits, Standards

ORDER OF RULEMAKING

By the authority vested in the Conservation Commission under sections 40 and 45 of Art. IV. Mo. Const., the commission amends a rule as follows:

3 CSR 10-9.359 Class I and Class II Wildlife Breeder: Records Required is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on July 15, 2014 (39 MoReg 1216-1219). Those sections with changes are reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: The commission received six (6) comments in support of stricter record keeping requirements for all captive herds containing white-tailed deer, mule deer, and their hybrids and one (1) comment opposing those changes. Those opposing the changes voiced opposition to the proposal that would require annual herd inventories to be conducted in the presence of and all herd records be signed by an attending accredited veterinarian and the potential difficulty of retaining records for fifteen (15) years.

The commission received no specific comments regarding proposed requirements for individual animal identification and documentation.

The commission received one thousand nine hundred and eighty-three (1,983) comments from individuals who expressed general support for stricter regulation of the captive cervid industry, one hundred fifty-four (154) comments from individuals who voice general opposition to all proposed changes, and fifty-nine (59) comments calling for a moratorium on new facilities in Missouri.

RESPONSE AND EXPLANATION OF CHANGES: In response to comments regarding requirement of annual inventories in the presence of and all herd records signed by an accredited veterinarian, only the herd inventory records require the signature of an accredited veterinarian. There is currently no approved live animal test for CWD. The presence of an accredited veterinarian during a herd inventory ensures proper evaluation of the health of the herd. Rigorous identification, health, and herd inventory records will also improve the department's ability to monitor white-tailed deer, white-tailed deer-hybrids, mule deer, or mule deer-hybrids in breeding facilities and to conduct effective disease investigations. If animals are moved from a facility, these records will be necessary to trace the animal in the future if CWD is located at that facility or at the facility to which the animal is transported.

In response to comments on difficulty of retaining records for 15 years, staff agree and are recommending changes to the rule to reflect a more common period of record retention found in veterinarian practices, 5 years.

The following changes are being recommended to the proposed amendment as a result of the comments:

(2) Each Class I and Class II wildlife breeder possessing white-tailed deer, white-tailed deer-hybrids, mule deer, or mule deer-hybrids will complete an annual physical herd inventory in the presence of an accredited veterinarian. Herd inventory records must be signed by the attending accredited veterinarian and must include the following for each animal: permanent physical identification, species, date of birth, gender, date of acquisition, complete address of source, complete address and name of current and previous owner, date of removal, destination of any animal removed, mortality date, cause of death (if known), official Chronic Wasting Disease test results for all white-tailed deer, white-tailed deer-hybrids, mule deer, or mule deer-hybrids six (6) months of age or older at time of death, and method and location of carcass disposal. These herd inventory records must be maintained to provide accountability for all purchases, sales, births, and mortality. These records and applicable state and federal animal health and movement records and permits for each animal shall be maintained on the premises of the wildlife breeder and shall be subject to inspection by an authorized agent of the department at any reasonable time for a period of at least [fifteen (15)]five (5) years. All animals over six (6) months of age must be identified with an official ear tag or other United States Department of Agriculture approved identification device.

Division 10—Conservation Commission

Chapter 9—Wildlife Code: Confined Wildlife: Privileges, Permits, Standards

ORDER OF RULEMAKING

By the authority vested in the Conservation Commission under sections 40 and 45 of Art. IV. Mo. Const., the commission amends a rule as follows:

3 CSR 10-9.560 Licensed Hunting Preserve Permit is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on July 15, 2014 (39 MoReg 1220). Those sections with changes are reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: The commission received five (5) comments in support of the proposal to disallow propagating, holding in captivity, and hunting hogs within big game hunting preserves unless already approved by a specific date and one (1) comment in opposition to the change. That individual indicated that hog hunting is a great sport and represents a stable market for many game ranches when other species are not in season.

RESPONSE AND EXPLANATION OF CHANGES: In response to the comment on hog hunting representing a stable market for many game ranches when other species are not in season, the new rule does not affect those big game hunting preserves already approved to allow hogs.

No changes to the rule have been made as a result of these comments; however, the date specified in Section (1) will be corrected to reflect the anticipated effective date of this rule.

(1) To maintain and operate a licensed hunting preserve and to buy, propagate, hold in captivity, hunt, and sell only legally obtained and captive-reared: pheasants, exotic partridges, quail, mallard ducks, and ungulates (hoofed animals), except hogs may only be propagated, held in captivity, and hunted on big game hunting preserves approved specifically for hogs by the department on or before [November 30, 2014]January 30, 2015.

Division 10—Conservation Commission

Chapter 9—Wildlife Code: Confined Wildlife: Privileges, Permits, Standards

ORDER OF RULEMAKING

By the authority vested in the Conservation Commission under sections 40 and 45 of Art. IV, Mo. Const., the commission amends a rule as follows:

3 CSR 10-9.565 Licensed Hunting Preserve: Privileges is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on July 15, 2014 (39 MoReg 1220-1223). Those sections with changes are reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: The commission received eleven thousand thirty-one (11,031) comments in support of the proposal to ban importation of live white-tailed deer, mule deer, and their hybrids and one thousand five hundred twenty-five (1,525) comments in opposition to the proposed changes. Those individuals who expressed opposition to proposed changes sited concerns regarding overregulation, diminished rights of private property owners, the onerous cost of complying with the new rules, and the need to promote and protect small business interests and alternative agriculture. Others questioned the science on which the proposed changes are based, the seriousness of the threat chronic wasting disease (CWD) poses to Missouri's deer population and don't feel additional regulations are warranted. Some argued that deer routinely migrate across state lines and a ban on importation would be ineffective. Others voiced strong support for allowing importation of animals quarantined and tested for chronic wasting disease prior to entering Missouri or didn't believe this measure was necessary if mandatory disease testing and double fencing requirements are implemented and enforced.

The commission also received eleven thousand seven hundred eighty-nine (11,789) comments in support of the proposed change that would require the holder of a licensed hunting preserve permit to test all mortalities of white-tailed deer, mule deer, and their hybrids that are older than six (6) months of age for CWD and to report confirmed positive disease results to the department, to comply with a mandatory herd disease response plan approved by the department in the event that CWD is discovered, and establishes a stipulation that the department can require additional disease sampling and testing during disease investigations or morbidity/mortality events. Eight hundred two (802) individuals voiced opposition to implementation of these mandatory testing requirements. Those individuals who expressed opposition to proposed changes argued that current regulations require them to test one hundred percent (100%) of the mortalities that occur inside their facilities while the Department of Conservation does not test free-ranging white-tailed deer to the same extent. Many sited concerns regarding overregulation, diminished rights of private property owners, the onerous cost

of complying with the new rules, and the need to promote and protect small business interests and alternative agriculture. Others questioned the science on which the proposed changes are based, the seriousness of the threat CWD poses to Missouri's deer population and don't feel additional regulations are warranted. The commission received ten (10) comments supporting a ban on construction of any new Class I and Class II wildlife breeding facilities for white-tailed deer, mule deer, and their hybrids within twenty-five (25) miles of a location where CWD-positive animals have been confirmed by the department and four (4) comments in opposition to that ban. Many of the individuals voicing support questioned if that distance was sufficient to protect Missouri's free-ranging deer herd and those voicing opposition believe the twenty-five (25) mile boundary is arbitrary.

The commission received one (1) comment on the potential difficulty of retaining records for fifteen (15) years.

The commission received no specific comments regarding proposals that would require Class I and Class II wildlife breeders that hold white-tailed deer, mule deer, and their hybrids as well as source herds to maintain participation in a U.S. Department of Agriculture-approved CWD herd certification program. However, the commission received one thousand nine hundred and eighty-three (1,983) comments from individuals who expressed general support for stricter regulation of the captive cervid industry, one hundred fifty-four (154) comments from individuals who voiced general opposition to all proposed changes, and fifty-nine (59) comments calling for a moratorium on new facilities in Missouri.

RESPONSE AND EXPLANATION OF CHANGES: In response to comments on concerns of overregulation, the Conservation Commission goes to great lengths to evaluate the importance and need for any regulation. Informing and educating the public are always considered first before any regulation is thoroughly vetted in the Department of Conservation. At times, however, the Department of Conservation must propose regulations to manage and/or protect the forest, fish, and wildlife of Missouri. Per its authority granted by the people and the constitution of Missouri, the Conservation Commission follows a regulatory process that evaluates the science, internal input, and public input along with determining if there is absolutely any other option, such as public education, that can be taken rather than regulation.

In response to comments on diminished rights of private property owners, the department disagrees that the proposed regulation diminishes the rights of property owners. Property owners will continue to be able to use their property for breeding and/or hunting captive wildlife. The proposed regulations are intended to reduce the risk of disease transmission between captive cervids and free-ranging deer via movement into and out of captive facilities. Current requirements in the *Wildlife Code* have not been sufficient to prevent the over 150 reported escapes that have occurred over the last three years.

In response to comments on onerous cost of complying with the new rules, the Department's original fencing proposal was for double fencing of all new permittees. Existing facilities would be grandfathered, and only required to double fence when the permit holder changed. Double fencing is preferred because it eliminates to the greatest possible extent the risk of disease transmission associated with animal movement out of and into the facility. During the public comment period, there was significant concern

expressed by the industry that double fencing was unnecessary, as owners would erect fences to protect their investment, and be cost prohibitive. Several argued that it would prohibit current permittees from passing on their business to their heirs, who could not afford double fencing. There was also concern raised by others that the fencing standards should consistently apply to both existing and new permittees. Based upon the above analysis, if importation is banned and mandatory testing is required, then any further reduction in risk associated with double fencing becomes less necessary. Staff believe the risk associated with fencing may be adequately addressed through enhanced fencing standards that do not include a double fence. Consequently, in consideration of the burden on permittees from this requirement in relation to the amount of risk that is actually reduced by double fencing, and the fact that enhanced fencing standards may be adequate to address the risks associated with animal movement, staff is recommending that the proposed fencing regulation be amended to require all facilities (existing and new) to have a single fence with enhanced standards regarding material and spacing. Staff are recommending that existing permittees should be given a reasonable amount of time, 24 months, to bring their existing facilities into compliance with this standard. See Response and Explanation of Change for 3 CSR 10-9.220 Wildlife Confinement Standards for specific changes.

With respect to costs associated with new testing requirements, the Department of Conservation believes CWD testing and ensuring source herds for cervids are enrolled into United States Department of Agriculture-approved CWD certification program is necessary to reduce disease risk for the captive and free-ranging herds of this state. The Department of Conservation does recognize there are circumstances not under the control of the permit holder that may lead to a mass casualty/mortality event. These mass casualty/mortality events may be burdensome on the permit holder. As a result of comments, staff are recommending changes to the proposed amendments regarding mass casualty/mortality events under certain conditions.

In response to comments on the need to promote and protect small business interests and alternative agriculture, the department's mission, as established by Missouri citizens in the Missouri constitution, is to protect and manage the forest, fish, and wildlife resources of the state of Missouri. Consistent with that mission, the department recognizes that Missouri's economy and quality of life are built on our forest, fish, and wildlife resources. More than \$11 billion is generated each year by conservation-related activities, such as hunting, fishing, wildlife watching, and forest products. Furthermore, 12,000 Missouri jobs and hundreds of businesses and communities depend on the approximately \$1 billion boost in economic activity related to deer hunting and watching that is supported by 520,000 deer hunters, millions of wildlife watchers, and thousands of landowners. In sum, business interests are advanced when the natural resources, including wildlife, are healthy and sustainable. The proposed regulations are intended to reduce the risk of disease transmission, and so will have long term benefits for the economic interests that rely on deer breeding and hunting in Missouri.

In response to comments on the science used to formulate this rule and the seriousness of the threat posed to Missouri's captive and free-ranging deer population by chronic wasting disease (CWD), CWD is transmitted by prions, which are abnormal proteins that attack the nervous system, and is always fatal to the infected animal. There is currently no approved live test for CWD, with the only approved test performed post-mortem. CWD is spread both directly from deer to deer and indirectly to deer from infected soil and other surfaces. The CWD prions accumulate in the brain, spinal cord, eyes, spleen

and lymph nodes of infected animals. Once well established in an area, CWD is impossible to eradicate. States with CWD must focus on limiting the spread of the disease and preventing its introduction to new areas. CWD could substantially reduce infected cervid populations by lowering adult survival rates and destabilizing long-term population dynamics. An example of active management limiting CWD is shown in Illinois where it has been kept at a low prevalence rate (annual prevalence rate of 0.94 ± 0.23%; Manjerovic, M.B., M. L. Green, N. Mateus-Pinilla, and J. Novakofski. 2014. The importance of localized culling in stabilizing chronic wasting disease prevalence in white-tailed deer populations. Preventive Veterinary Medicine 113(2014):139-145.).

In response to comments on deer routinely migrating across state lines and that a ban on importation would be ineffective, there are two factors to consider in regards to white-tailed deer migrating across state lines. First, although free-ranging white-tailed deer do not recognize state boundaries, they also do not typically traverse several states in their lifetimes; that is, any movement of free-ranging animals will be from neighboring states. Although it is true that some of our neighboring states have confirmed chronic wasting disease in their free-ranging herds, the cessation of any anthropogenic movement will greatly decrease the risk of disease introduction. Second, we have to remember the relative risk associated with the individual animals. Typical home ranges sizes of adult male white-tailed deer are 1-2 square miles with one-time dispersal distances less than 25 miles. Therefore, only the deer within a small geographic area around Missouri's border could be reasonably expected to potentially move into Missouri. However, this is not true when dealing with human-aided movement of captive cervids which cross multiple states in the matter of days or hours.

In response to comments on allowing importation of animals quarantined and tested for chronic wasting disease prior to entering Missouri or didn't believe this measure was necessary if mandatory disease testing and double fencing requirements are implemented and enforced, an issue is that chronic wasting disease is unique in its ability to elude diagnostics. Mandatory disease testing of mortalities and double fencing are risk mitigation measures, but neither will address the risk of disease introduction from imported animals. A ban on importation is the best proactive action to take without an effective and reliable live animal test. Without an accepted live animal test of CWD, no animal can be tested prior to importation. The current disease testing program only assesses that there is a low-risk of a herd having CWD because it relies on the testing of dead deer from the herd and cannot assess the status of individual animals.

In response to comments stating that current regulations require testing of 100% of the mortalities that occur inside their facilities while the Department of Conservation does not test to the same extent in the free-ranging deer population, there are several issues to consider. It is important to realize that captive and free-ranging wildlife present different challenges with disease detection. Both the testing in captive facilities and the testing of free-ranging deer are designed to reach sample sizes to reasonably detect CWD if it is present. Captive facilities, which participate in the voluntary program, are required to test 100% because of the relatively few deer that die within a facility on an annual basis. If there was a live animal test for CWD we could annually assess the status of the herd as with other regulated diseases such as tuberculosis and brucellosis. However, only testing mortalities greatly limits the number of deer that are tested within a facility. Therefore, in the absence of an approved live animal test we must ensure that a sufficient number of deer are tested to reasonably detect the disease. Additionally, while deer breeders typically make every reasonable effort to test all mortalities, some

carcasses are not discovered in time to be tested. Third, not all breeders take part in the United States Department of Agriculture-approved chronic wasting disease certification program as it is voluntary. Finally, once an animal is moved to a hunting preserve it is not required to be tested under the guidelines of the United States Department of Agriculture-approved chronic wasting disease program. So animals that are moved to big game hunting preserves often die with unknown disease statuses.

In response to comments against banning construction of a big game hunting preserve facility within 25-miles of a positive confirmed by the department, this was is intended to reduce the risk of exposing more deer to the disease, which could then spread throughout the state. Published peer-reviewed studies have found that, on average, most deer do not disperse more than approximately 25–30 miles (Nixon, C. et al. 2007. White-Tailed Deer Dispersal Behavior in an Agricultural Environment. American Midland Naturalist, 157:212-220.; Diefenbach, D. et al. 2008. Modeling Distribution of Dispersal Distances in Male White-Tailed Deer. Journal of Wildlife Management, 72:1296-1303.). The Department of Conservation does recognize that five-years has been used as a quarantine period within the United States Department of Agriculture-approved Chronic wasting disease certification program. Changes are recommended for this rule to reflect this quarantine period in regards to new facilities within 25-miles of a positive confirmed by the department.

In response to comments on difficulty of retaining records for 15 years, staff agree and are recommending changes to the rule to reflect a more common period of record retention found in veterinarian practices, 5 years.

The following changes are being recommended to the proposed amendment as a result of the comments with additional changes to this rule made for clarity:

(B) Big Game Hunting Preserve.

- 1. A big game hunting preserve for ungulates shall be a fenced single body of land, not dissected by public roads, and not less than three hundred twenty (320) acres and no more than three thousand two hundred (3,200) acres in size. The hunting preserve shall not be cross-fenced into portions of less than three hundred twenty (320) acres. The hunting preserve shall be fenced so as to enclose and contain all released game and exclude all hoofed wildlife of the state from becoming a part of the enterprise and posted with signs specified by the department. Fence requirements shall meet standards specified in 3 CSR 10-9.220. Fencing for hogs shall be constructed of twelve (12) gauge woven wire, at least five feet (5') high, and topped with one (1) strand of electrified wire. An additional two feet (2') of such fencing shall be buried and angled underground toward the enclosure interior. A fence of equivalent or greater strength and design to prevent the escape of hogs may be substituted with written application and approval by an agent of the department.
- 2. The permittee may exercise privileges provided in 3 CSR 10-9.353 only for species held within breeding enclosure(s) contained within or directly adjacent to the big game hunting preserve. Any such breeding enclosure(s) shall meet standards specified in 3 CSR 10-9.220. Breeding enclosures may be separated from the hunting preserve by a public road, but must be directly adjacent. Other breeding enclosures not contained within or directly adjacent to the hunting preserve are not covered under the privileges of this rule.
- 3. Any person taking or hunting ungulates on a big game hunting preserve shall have in his/her possession a valid licensed hunting preserve hunting permit. The permittee

shall attach to the leg of each ungulate taken on the hunting preserve a locking leg seal furnished by the department, for which the permittee shall pay ten dollars (\$10) per one hundred (100) seals. Any packaged or processed meat shall be labeled with the licensed hunting preserve permit number.

- 4. **Except as provided in this section,** [*The*]**the** holder of a Big Game Hunting Preserve Permit shall have an accredited veterinarian collect and submit samples from all known cases of mortality for cervids over six (6) months of age to a United States Department of Agriculture approved laboratory for Chronic Wasting Disease testing. The department reserves the right to require additional sampling and testing during disease investigations or morbidity/mortality events. Animal health standards and movement activities shall comply with all state and federal regulations.
- A. In the event of a mass casualty/mortality event, the director of the department may exempt the holder of a big game hunting preserve permit from the Chronic Wasting Disease testing requirements within this rule. The following conditions apply:
- (I) All mass casualty/mortality event exemption requests must originate from an accredited veterinarian and must be verbally reported to a conservation agent, regional protection supervisor, or the state wildlife veterinarian of the department.
- (II) The department will have access to collect and submit disease samples from all known cases of mortality for cervids, pertaining to, and in the event of a mass casualty/mortality event.
- 5. Big game hunting preserve permittees shall report escaped animals immediately to an agent of the department.
- 6. Confirmed positive results from any disease test for a cervid must be verbally reported by the permit holder to a conservation agent or regional protection supervisor of the department within twenty-four (24) hours of receiving the report and provide a copy of the testing report to the state wildlife veterinarian of the department within seventy-two (72) hours. In the event of confirmed positive results from a Chronic Wasting Disease test, the permit holder shall comply with a herd disease response plan approved by the department. The plan [shall]may include, but not be limited to, quarantine requirements, testing and depopulation, premises cleaning and disinfection, additional fencing requirements, and restocking guidelines. Failure to comply with an approved herd disease response plan may result in the suspension or revocation of permit privileges.
- 7. All ungulates acquired by a holder of a big game hunting preserve permit must be individually identified on a Breeder's Movement Certificate or a Certificate of Veterinary Inspection. A Breeder's Movement Certificate may be completed by the breeder. The form must list the official identification, age, gender, species, complete address of both the origin and destination, and complete address and name of buyer and seller. The original form must accompany the shipment and a copy shall be maintained by the herd of origin for at least [fifteen (5)]five (5) years. Sources for cervids must be enrolled in a United States Department of Agriculture-approved Chronic Wasting Disease-herd certification program.
- 8. New **permits for** big game hunting preserves [shall]will not be **issued for a period of five (5) years** [constructed] within twenty five (25) miles of a location where Chronic Wasting Disease-positive animal(s) have been confirmed by the department.
- 9. Live cervids imported into the state shall not be held in a licensed big game hunting preserve. Only cervids born inside the state of Missouri may be propagated, held in captivity, and hunted on big game hunting preserves.

Division 10—Conservation Commission

Chapter 9—Wildlife Code: Confined Wildlife: Privileges, Permits, Standards

ORDER OF RULEMAKING

By the authority vested in the Conservation Commission under sections 40 and 45 of Art. IV. Mo. Const., the commission amends a rule as follows:

3 CSR 10-9.566 Licensed Hunting Preserve: Records Required is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on July 15, 2014 (39 MoReg 1224-1227). Those sections with changes are reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: The commission received six (6) comments in support of stricter record keeping requirements for all captive herds containing white-tailed deer, mule deer, and their hybrids and one (1) comment opposing those changes. Those opposing the changes voiced opposition to the proposal that would require annual herd inventories to be conducted in the presence of and all herd records be signed by an attending accredited veterinarian and the potential difficulty of retaining records for fifteen (15) years.

The commission received one thousand nine hundred and eighty-three (1,983) comments from individuals who expressed general support for stricter regulation of the captive cervid industry, one hundred fifty-four (154) comments from individuals who voiced general opposition to all proposed changes, and fifty-nine (59) comments calling for a moratorium on new facilities in Missouri.

RESPONSE AND EXPLANATION OF CHANGES: In response to comments on opposition to requiring annual herd inventories to be conducted in the presence of and all herd records signed by an attending accredited veterinarian, the proposed amendment did not require an annual inventory or for it to be signed by an accredited veterinarian. Furthermore, the inventory will be for all acquired ungulates.

In response to comments on difficulty of retaining records for 15 years, staff agree and are recommending changes to the rule to reflect a more common period of record retention found in veterinarian practices, 5 years.

The following changes are recommended to the proposed amendment as a result of the comments:

(1) Big game hunting preserve permittees shall keep a permanent record, by date, of the number of each species held, acquired, propagated, sold, released, the number of each species taken on the preserve, and the full name, address, and permit number (if

applicable) of each buyer, seller, shooter, and/or taker, on forms provided by the department. Printed copies of these forms can be obtained from the Missouri Department of Conservation, PO Box 180, Jefferson City, MO 65102-0180 and online at www.missouriconservation.org. The holder of a big game hunting preserve permit must establish and maintain a system of inventory for all acquired ungulates that includes the following for each animal: permanent physical identification, species, date of birth, gender, date of acquisition, complete address of source, complete address and name of both the current and previous owner, mortality date, cause of death (if known), official Chronic Wasting Disease test results as required in 3 CSR 10-9.565 (1)(B)4., method and location of carcass disposal, and the numbers from the Licensed Hunting Preserve Permit of the hunter and locking leg seal (if applicable). These records and applicable state and federal animal health and movement records and permits for each animal shall be maintained on the premises of the licensed big game hunting preserve for at least [fifteen (15)]five (5) years and shall be subject to inspection by an authorized agent of the department at any reasonable time.